

MAY - 5 2011

12 510(k) Summary for Public Disclosure

12.1 Submitter's Name/Contact Person

Donna R. Lunak
St. Jude Medical
One St. Jude Medical Drive
St. Paul, MN 55117 USA

The Establishment Registration Number is 2184149.

12.2 Predicate Device

EnSite Velocity System with PRT (K101667).

12.3 Common or Usual Name

Electrophysiology Mapping System with console and catheter

12.4 Proprietary Name

EnSite Velocity System

Consisting of:

EnSite Multi-electrode Diagnostic Catheter (EnSite Array™ – Model EC1000)
EnSite Electrophysiology Workstation – Model EE3000
EnSite NavX Surface Electrode Kit – Model EN0010

12.5 Classification Name

DQK, Programmable diagnostic computer (21 CFR 870.1425), Class II,
Circulatory Systems Device Panel

12.6 Hardware Description

The EnSite Velocity System consists of the following:

- Display Workstation
- Amplifier

12.7 Indications for Use

The EnSite Velocity™ Cardiac Mapping System is a suggested diagnostic tool in patients for whom electrophysiology studies are indicated.

- When used with the EnSite Array™ Catheter, the EnSite System is intended to be used in the right atrium of patients with complex arrhythmias that may be difficult to identify using conventional mapping systems alone.

OR

- When used with the EnSite NavX Surface Electrode Kit, the EnSite System is intended to display the position of conventional electrophysiology (EP) catheters in the heart.

12.8 Intended Use

When used with the EnSite Velocity System v.1.5.1 MediGuide gMPS System Interface Module, the EnSite Velocity System interfaces to the MediGuide gMPS System to combine and display SJM MediGuide gMPS System processed patient positioning and orientation information.

12.9 Device Comparison to the Predicate Device

The EnSite Velocity System v.1.5.1 has the same intended use and fundamental scientific technology as the predicate device. All technological characteristics of the EnSite Velocity System v.1.5.1 are substantially equivalent to the predicate device.

12.10 Summary of Non-Clinical Testing

Bench testing was performed to confirm that the changes met design requirements and did not affect the safety or effectiveness of the product.

As part of the testing of EnSite Velocity System v.1.5.1, a gMPS II MediGuide emulator was used to simulate the gMPS II (K102905). The gMPS II MediGuide emulator was used to verify packets sent by the EnSite Velocity System. In addition, the emulator allowed the testing of error conditions by simulating error conditions that would typically be sent by the gMPS II (K102905). The testing included testing of the EnSite Velocity System to ensure that it handles the error conditions as expected.

The full software performance benchmarks which measure map and waveform display refresh rates, data rates, and time to display a frame of map and waveforms were conducted. The performance of the EnSite Velocity System was

observed during verification and integrated system testing to ensure performance was not severely impacted by the integration with the gMPS II (K102905).

12.11 Summary of Design Control Activities

The development of the EnSite Velocity System v.1.5.1 was performed in accordance with SJM's Quality System requirements, and in compliance with Quality System Regulation design controls requirements documented in 21 CFR 820.30. A Declaration of Conformity with Design Controls follows in section 13.4.

12.12 Conclusion

The EnSite Velocity v.1.5.1 has the same indications for use and fundamental scientific technology as the predicate device. All technological characteristics of the EnSite Velocity System v.1.5.1 are substantially equivalent to the predicate device.

Where operational and performance differences exist between the proposed device and the predicate device, performance testing demonstrated that these differences do not adversely affect the device's safety and effectiveness.

Therefore, St. Jude Medical considers the EnSite Velocity System v.1.5.1 to be substantially equivalent to the predicate device.



Food and Drug Administration
10903 New Hampshire Avenue
Document Control Room -WO66-G609
Silver Spring, MD 20993-0002

MAY - 5 2011

St. Jude Medical
c/o Donna R. Lunak
Regulatory Specialist
One St. Jude Medical Drive
Saint Paul MN 55117

Re: K110549
Trade/Device Name: EnSite Velocity System V.1.5.1 with MediGuide gMPS System
Interface Module
Regulation Number: 21 CFR 870.1425
Regulation Name: Programmable Diagnostic Computer
Regulatory Class: Class II (two)
Product Code: DQK
Dated: March 29, 2011
Received: March 30, 2011

Dear Ms. Lunak:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

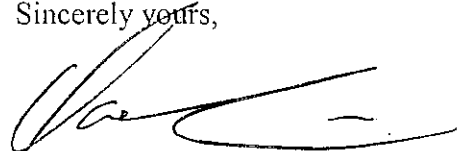
Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must

comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please go to <http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOffices/ucm115809.htm> for the Center for Devices and Radiological Health's (CDRH's) Office of Compliance. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to <http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm> for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address <http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm>.

Sincerely yours,


for Bram D. Zuckerman, M.D.
Director
Division of Cardiovascular Devices
Office of Device Evaluation
Center for Devices and
Radiological Health

Enclosure

7 Indications for Use

Device Name: EnSite Velocity System

Indications for Use:

The EnSite Velocity™ Cardiac Mapping System is a suggested diagnostic tool in patients for whom electrophysiology studies are indicated.

- When used with the EnSite Array™ Catheter, the EnSite System is intended to be used in the right atrium of patients with complex arrhythmias that may be difficult to identify using conventional mapping systems alone.

OR

- When used with the EnSite NavX Surface Electrode Kit, the EnSite System is intended to display the position of conventional electrophysiology (EP) catheters in the heart.

Intended Use:

When used with the v.1.5.1 MediGuide gMPS System Interface Module, the EnSite Velocity System interfaces to the MediGuide Guided Medical Positioning System II to combine and display gMPS II processed patient positioning and orientation Mapping information.

Prescription Use X AND/OR Over-The-Counter Use
(Part 21 CFR 801 Subpart D) (21 CFR 801 Subpart C)

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER
PAGE IF NEEDED)

Concurrence of CDRH, Office of Device Evaluation (ODE)


(Division Sign-Off)
Division of Cardiovascular Devices

510(k) Number K110549